

REMARKS

This is in response to the Office Action mailed August 3, 2005. In the Office Action, all claims 1-22 were rejected. With this Amendment, claims 1 and 10 are amended; claims 14-22 are canceled; and the remaining claims are unchanged in the application.

Applicants respectfully note that an Information Disclosure Statement was filed on June 13, 2005 with Applicants' previous Amendment. To date, Applicants have not received an initialed form PTO-1449 indicating consideration of those references. Applicants respectfully request that such form be provided in order for Applicants to have a concrete record of consideration of those references.

Section Two of the Office Action indicated independent claims 1 and 10 were rejected under 35 U.S.C. § 102(b) as being anticipated by Jewell et al. (U.S. Patent 5,367,911). Applicants have amended independent claims 1 and 10 in order to better distinguish those claims from the subject matter of Jewell et al.

As set forth in Applicants' previous response, Jewell et al. is directed primarily to a fundamentally different device than a flow-through conductivity sensor. However, Applicants are mindful of FIG. 10 of the Jewell et al. reference and the Examiner's assertion that two electrodes 122, 124 being connected by secondary coil 134 of transformer 132 while current (I) flows in the primary 136. Moreover, Applicants are responsive to the Examiner's belief that current flows between electrode 124 and current sensing electrode 122. Applicants respectfully note column 9, line 66 through column 10, line 2 which indicate that the patentee believes that current flow from electrode 122 flows across fluid segment 128 to conduit 126. This appears to be in distinct contrast to the Examiner's assertion with respect to current flow between guard electrode 124 and sensing electrode 122. In order to address the possibility that Jewell et al.'s

understanding of their own circuit was potentially erroneous, and that some stray current may have passed through the fluid between sensing electrode 122 and guard electrode 124, Applicants have amended independent claims 1 and 10 to recite that the conductivity measurement is based on measuring the current between the first and second electrodes through the process fluid. Clearly the current output signal in line 136 of Jewell et al. is indicative of the conductivity of the fluid in segment 128. As indicated by Jewell et al., "The variation in current in the line 134 to the transformer 132 to the conductor 122 operates through the transformer to generate a signal in a current output line 136." Accordingly, the current output on line 136 is indicative of current flow between sensing electrode 122 and conduit surface 126. Applicants respectfully submit that amended independent claims 1 and 10 are allowable over Jewell et al. Moreover, Applicants respectfully submit that dependent claims 2-9 and 11-13 are allowable as well by virtue of their dependency, either directly or indirectly, from allowable independent claims.

In conclusion, Applicants respectfully submit that the entire application is now in condition for allowance. Reconsideration and favorable action are respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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